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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/757,491

01/15/2004

William Morton

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27522

7590

11/02/2005

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EXAMINER

GARCIA JR, RENE

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/757,491

Applicant(s)

MORTON ET AL.

Examiner

Rene Garcia, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 12-14, 25 and 28 is/are rejected.
- 7) ☐ Claim(s) 6-11, 15-24, 26 and 27 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>17 March 2004</u> . | 6) <input type="checkbox"/> Other: ____ |

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DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Page 17 and 18 list WO 00689992 Sukeyasu et al. and WO 00017316 Thawley et al. but not on Information Disclosure Statement.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Page 13, Line 9 – Reference 21; Page 15, Line 6 – Figure 7 Reference 50; Page 15, Line 14 – Figure 7 Reference 54; Page 17, Line 3 – Figure 10b: 35,51,82,1,32,33,20,41,54. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any

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required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: Page 17, Line 3 – refers to figure 10b perhaps meant 10c; Page 15, Line 10 – use of “shotshells 11” should be “printed shotshells 11”.

Appropriate correction is required.

3. Claim 1 is objected to because of the following informalities: inconsistent terminology: lines 6 and 10 use “the cylindrical ammunition” while lines 8, 10, 14 use “the ammunition.

Appropriate correction is required.

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 2 line 19-20 “the printed ammunition”.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 13, 14, 25 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Albin (US 4,384,518).

Albin disclose the following claimed limitations:

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*regarding claim 13, method of applying indicia about an external surface of cylindrical ammunition/**shotshell, 16/** comprising: (fig. 5; col. 7, lines 42-48 & col. 10, lines 17-23)

*providing a plurality of ammunition/**16/** (figs. 2 & 5; col. 7, lines 42-48 & col. 10, lines 17-23)

*orienting the ammunition/**16/** for application of the indicia thereon (figs. 2 & 5; col. 10, lines 17-23)

*applying the indicia to a substantial portion of an entire outer surface of the ammunition/**16/** (figs. 2 & 5; col. 9, lines 7-19)

*regarding claim 14, rotating the ammunition about an axis while applying the indicia (fig. 5; col. 10, lines 17-23)

*regarding claim 25, camouflaged ammunition/**shotshell, 16/** comprising a substantially cylindrical outer surface (fig. 5)

*indicia is applied to substantially the entire outer surface (col. 10, lines 17-23)

*regarding claim 28, wherein the ammunition is a shotshell/**16/** (col. 7, line 45)

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 1, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albin (US 4,384,518) in view of Niestrath (US 6,536,346).

Albin disclose the following claimed limitations:

*regarding claim 1, apparatus for printing indicia on an external surface of cylindrical ammunition/shotshells, 16/ having an axis comprising: (figs. 2 & 5; col. 10, lines 5-6; col. 7, lines 42-48 & col. 10, lines 17-23)

*conveyor for carrying a plurality of cylindrical ammunition/16/ thereon and for rotating the cylindrical ammunition/16/ about the ammunitions axis (col. 9, lines 59- col. 10, lines 26)

*regarding claim 5, ammunition is a shotshell/16/ (col. 7, line 45) further comprising a case and a hull attached thereto (figs. 5 & 12)

Albin discloses printing on cylindrical containers (objects) such as shotshell ammunition (col. 1, lines 11-26)

Albin does not disclose the following claimed limitations:

*regarding claim 1, plurality of inkjet print heads for spraying preprogrammed indicia on the ammunition

*traversing the plurality of inkjet print heads for printing the preprogrammed indicia thereabout

*controller for causing the pre-programmed indicia to be sprayed on the ammunition as the ammunition is rotated

*regarding claim 4, controller is a computer

Niestrath disclose the following:

Niestrath disclose printing on hollow bodies of plastic material, for example bottles (inherent cylindrical shape) (col. 12, lines 33-54) for the purpose of decorating an article/bottle/ with: images, graphics, text, digits and numbers

*regarding claim 1, plurality of inkjet print heads/20/ for spraying preprogrammed indicia on the ammunition/cylinder/ (col. 5, lines 31-34; col. 5, lines 55-60) for the purpose of producing print images, including multi-color images, of very high quality

*traversing the plurality of inkjet print heads for printing the preprogrammed indicia thereabout (col. 5, 62-64) for the purpose of moving the article/bottle/ to be decorated along the transportation/conveyor/ path

*controller for causing the pre-programmed indicia to be sprayed on the ammunition/cylinder/ (col. 5, lines 58-62) for the purpose of not subjecting the ammunition to an increased pressure during printing

*regarding claim 4, controller is a computer col. 5, line 58) for the purpose of producing print images, including multi-color images, of very high quality and also possible to achieve a high production rate.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize printing on hollow bodies of plastic material, for example bottles; plurality of inkjet print heads for spraying preprogrammed indicia on the ammunition, traversing the plurality of inkjet print heads for printing the preprogrammed indicia thereabout,

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controller for causing the pre-programmed indicia to be sprayed on the ammunition as the ammunition is rotated; preprogrammed indicia is a camouflage pattern; and controller is a computer as taught by Niestrath into Albin for the purposes of: ; producing print images, including multi-color images, of very high quality; moving the article/bottle/ to be decorated along the transportation/conveyor/ path; not subjecting the ammunition to an increased pressure during printing; and producing print images, including multi-color images, of very high quality and also possible to achieve a high production rate.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Albin (US 4,384,518) as modified by Niestrath (US 6,536,346) as applied to claim 1 above, and further in view of Mackerell et al. (US 6,672,219).

Albin as modified by Niestrath disclose the claimed limitations except for the following:

*regarding claim 3, indicia is a camouflage pattern

Mackerell et al. disclose the following:

* regarding claim 3, indicia is a camouflage pattern (col. 2, lines 28-35)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize an indicia which is a camouflage pattern as taught by Mackerell et al. into Albin as modified by Niestrath for the purpose of not reflecting light and to blend into the ambient environment.

10. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albin (US 4,384,518) as modified by Niestrath (US 6,536,346) as applied to claim 1 above, and further in view of Wen et al. (US 6,092,890).

Albin as modified by Niestrath disclose the claimed limitations except for the following:

- *regarding claim 2, inkjet print heads spray UV curable ink and further comprises:

- *UV source for curing the UV-curable ink

- *wherein the UV source is positioned in a housing

- *regarding claim 12, plurality of inkjet printer heads further comprises:

- *at least one printer head for printing yellow

- *at least one printer head for printing cyan

- *and at least one printer head for printing magenta

Niestrath disclose the use of Multi-color printing with different inks (col. 9, lines 28-29)

Wen et al. disclose the following:

- *regarding claim 2, inkjet print heads spray UV curable ink (col. 4, lines 29-43) and further comprises:

- *UV source/**UV light source, 50/** for curing the UV-curable ink (col. 3, lines 40-44)

- *wherein the UV source is positioned in a housing(fig. 1, on the holder/45/ inside the printer housing; col. 3, lines 14-17) for the purpose of hardening or solidifying the inks and to improve the physical durability as well as the image stability of the print image

- *regarding claim 12, plurality of inkjet printer heads/31-34/ (fig. 1) further comprises:

- *at least one printer head for printing yellow (col. 2, line 40)

- *at least one printer head for printing cyan (col. 2, line 39)

*and at least one printer head for printing magenta (col. 2, line 39) for the purpose of printing a multi-color print image

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize a plurality of inkjet printer heads with at least one printer head for printing yellow; at least one printer head for printing cyan; and at least one printer head for printing magenta as taught by Wen et al. into Albin as modified by Niestrath for the purpose of: hardening or solidifying the inks and to improve the physical durability as well as the image stability of the print image; and printing a multi-color print image.

Allowable Subject Matter

11. Claims 6-12, 15-24, 26 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:

13. The primary reason for the allowance of claim 6 is the inclusion of the limitations being for an apparatus for printing indicia on an external surface of cylindrical ammunition having an axis: including a plurality of spindles projecting from the conveyor for insertion into and engagement of an open end of a shotshell case and means for orienting the shotshell to present the open end of the case to the spindle for engagement thereon. It is these limitations found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

14. The primary reason for the allowance of claim 15 is the inclusion of the method steps being controlling one or more ink jet print heads. It is this step found in each of the claims, as

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they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

15. The primary reason for the allowance of claim 16 is the inclusion of the method steps being controlling one or more ink jet print heads. It is this step found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

16. The primary reason for the allowance of claim 17 is the inclusion of the method steps being: pre-treating the substantial portion of the entire outer surface of the ammunition using a corona treatment; and controlling one or more ink jet print heads. It is this step found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

17. The primary reason for the allowance of claim 18 is the inclusion of the method steps being actuating the conveyor to cause the engaged shotshells to be rotatably passed adjacent a plurality of inkjet print heads; actuating the inkjet prints heads to spray ink for imparting the indicia about substantially the entire external surface of each shotshell. It is these steps found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

18. The primary reason for the allowance of claim 20 is the inclusion of the method steps being wherein the indicia printed on the ammunition is a camouflage pattern. It is this step found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

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19. The primary reason for the allowance of claim 22 is the inclusion of the method steps being: position the heat transfer sleeve over at least a portion of the external surface of the ammunition; and applying sufficient heat to the heat transfer sleeve to cause the heat transfer sleeve to shrink and bond to the external surface of the ammunition. It is these steps found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

20. The primary reason for the allowance of claim 26 is the inclusion of the method steps being wherein the indicia comprises at least a camouflage pattern. It is this step found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

21. The primary reason for the allowance of claim 27 is the inclusion of the method steps being wherein the indicia comprises: camouflaged pattern covering a portion of the outer surface; and non-glare ink covering a remaining portion of the outer surface. It is these steps found in each of the claims, as they are claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.


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Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rene Garcia, Jr. whose telephone number is (571) 272-5980. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Rene Garcia Jr
25 October 2005


K. REGGINS
PRIMARY EXAMINER

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